

AMENDMENTS TO THE CLAIMS

1. (currently amended) A method for simulating hardware circuits during which voltages are calculated at a plurality of circuit nodes, comprising the steps of:

- (a) carrying out a first DC-simulation run at the beginning~~begin~~ of a functional cycle,
- (b) carrying out a second DC-simulation run at the end of said cycle,
- (c) comparing simulated values from both runs at respective circuit nodes, and
- (d) storing mismatch information about static error afflicted nodes at which the calculated values differ by more than a predetermined first threshold value.

2. (currently amended) The method according to claim 1 further comprising the steps of:

- (e) outputting~~putting out~~ said mismatch information for a manual correction,
- (f) carrying out a transient analysis covering the same functional cycle after correction,
- (g) comparing calculated values from said analysis with calculated values from said first or second DC simulation run at respective circuit nodes, and
- (h) storing mismatch information about dynamic error afflicted nodes at which the calculated values differ by more than a predetermined second threshold value.

3 - 4. (cancelled)

5. (original) The method according to claim 1 comprising the step of setting the START TIME prior to the begin of a functional cycle.
6. (original) The method according to claim 1 in which the hardware is built according to silicon-on insulator (SOI) technology.
7. (currently amended) A computer system having installed program means comprising program code portions for performing the steps:
- (a) carrying out a first DC-simulation run at the beginning ~~begin~~ of a functional cycle,
 - (b) carrying out a second DC-simulation run at the end of said cycle,
 - (c) comparing simulated values from both runs at respective circuit nodes, and
 - (d) storing mismatch information about static error afflicted nodes at which the calculated values differ by more than a predetermined first threshold value.
8. (currently amended) The computer system according to claim 7 further comprising program code portions for performing the steps:
- (e) ~~outputting~~ ~~putting out~~ said mismatch information for a manual correction,
 - (f) carrying out a transient analysis covering the same functional cycle after correction,
 - (g) comparing calculated values from said analysis with calculated values from said first or second DC simulation run at respective circuit nodes, and
 - (h) storing mismatch information about dynamic error afflicted nodes at which the calculated values differ by more than a predetermined second threshold value.

9 -12. (cancelled)

13. (currently amended) Computer program product stored on a computer-readable ~~usable~~ medium, said product comprising code that, when executed, computer-readable program for causing a computer to perform the method comprising:

- (a) carrying out a first DC-simulation run at the beginning ~~begin~~ of a functional cycle,
- (b) carrying out a second DC-simulation run at the end of said cycle,
- (c) comparing simulated values from both runs at respective circuit nodes, and
- (d) storing mismatch information about static error afflicted nodes at which the calculated values differ by more than a predetermined first threshold value.

14. (currently amended) The computer program product according to claim 13 wherein said method further comprises performing the steps:

- (e) outputting ~~putting out~~ said mismatch information for a manual correction,
- (f) carrying out a transient analysis covering the same functional cycle after correction,
- (g) comparing calculated values from said analysis with calculated values from said first or second DC simulation run at respective circuit nodes, and
- (h) storing mismatch information about dynamic error afflicted nodes at which the calculated values differ by more than a predetermined second threshold value.